Remarks

Claims 1-11 and 13-21 are pending in this application. In a final Office Action dated June 17, 2004, the Examiner rejected claims 1, 7-9, 11, 13, 17-19 and 21 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,429,768 to Flick *et al.* (Flick) in view of U.S. Patent No. 6,393,254 to Pousada Carballo *et al.* (Pousada). The Examiner rejected claims 2 and 14 under 35 U.S.C. § 103(a) as being unpatentable over Flick in view of Pousada and in further view of U.S. Patent No. 4,498,193 to Richardson. The Examiner rejected claims 3, 5-6 and 16 under 35 U.S.C. § 103(a) as being unpatentable over Flick in view of Pousada and in further view of International Publication WO 98/34412 (referred to as GEYRA). The Examiner rejected claims 4 and 15 under 35 U.S.C. § 103(a) as being unpatentable over Flick in view of Pousada and in further view of U.S. Patent No. 6,222,458 to Harris. The Examiner rejected claims 10 and 20 under 35 U.S.C. § 103(a) as being unpatentable over Flick in view of Pousada and in further view of U.S. Patent No. 6,570,689 to Kushita. Applicants respectfully disagree with the Examiner's rejections and respectfully request reconsideration in light of the following remarks.

Claim 1 provides a method for inhibiting wireless telecommunications within a limited region of the telecommunications coverage. A plurality of noise signals are generated. Each noise signal is within a different portion of the frequency range of the wireless telecommunication. The noise signals are *broadcast from different locations* into the region such that telecommunications is inhibited in the overlap of the broadcasted noise signals.

The Examiner rejected claim 1 as an obvious combination of Flick and Pousada. The Examiner admits that "Flick fails to teach a method for broadcasting the plurality of noise signals from different locations into the region such that telecommunications is inhibited in the overlap of the broadcasted noise signals." (Pg. 2.) Instead, the Examiner relies on Pousada, citing column 3, lines 4-35. This text together with the preceding five lines are reproduced as follows:

> In basic embodiments, the disabler may be used in areas
> that receive carriers from only a single base station. In this case,
> one of those carriers contains signaling channels, and therefore
> only a single interference generator module EMITTER (10) is
> necessary.

In places that receive several carriers from different base stations, the system may have a single MODECON (2) module and as many interference generator modules EMITTER (10) as necessary.

It is desirable to ensure that the disabler will not affect mobile terminals located outside the target area. The interference level emitted by the disabler is related to the carrier level as received inside the target area, with the interference level being sufficiently high that terminals are disabled. The system should not interfere with mobile terminals located outside the target area. To achieve this, the carrier-to-interference ratio at the input of an external mobile terminal, K_r, should be typically 20 dB higher than the same ratio for a terminal inside the enclosed target area.

(1) Assume that in a given moment there are n active carriers with signaling channels in the neighborhood of the disabler.

(2) Then assume that user/traffic channels and signaling channels are organized in a series of multiplexes, which modulate each of the n active carriers.

(3) The resulting bandwidth of a modulated carrier i is B_i, $i = 1 \ldots n$.

(4) Defme P_i as the minimum power level associated with the level of modulated carrier i which disables reception outside the target area.

(5) At the ith interference generator module EMITTER (10), c_g^i is defined as the gain control (7) of its power amplifier (14), selected by control unit μC (5), and N_i (c_g^i) is defined as the level of the interference signal measured at the output of module EMITTER (10), across bandwidth N_i, during the signaling time slot of the signaling channels. N'_i is the power level produced by EMITTER (10) outside the target area.

(6) Let L be losses due to walls surrounding the target area (typically higher than 10 dB), and let OA be the interference signal attenuation outside the target area due to the directivity of antenna OUT (11).
It must hold that: $K_r = P_i - N'_i$.
Since $N_i = P_i - L$
and $N'_i = N_i - L - OA$,
then: $K_r = P_i - N'_i = P_i - (N_i - L - OA) = P_i - (P_i - L - L - OA)$
and, as a consequence, $K_r = 2*L + OA$.

Pousada discloses using one emitter for each channel to be blocked. Further, nothing in Pousada teaches or fairly suggests broadcasting signals from different locations as provided in claim 1. The fact that Pousada discloses using multiple emitters for blocking multiple channels does not suggest that Pousada recognizes the use or benefits of broadcasting signals from different locations to create a region in which telecommunications is inhibited.

No combination of Flick or Pousada teaches or suggests Applicants' invention as provided in claim 1. Claims 2-11 depend from claim 1 and are therefore also patentable.

Independent claim 13 provides a system for inhibiting wireless telecommunications within a limited region of the telecommunications coverage. The system includes a plurality of radio frequency noise generators each generating a noise signal within a different portion of the frequency range of the wireless telecommunications. The limited region of the telecommunications coverage is formed by overlapping coverage areas produced by antennas, each in communication with one of the generators. Control logic initiates or suspends broadcasting of each noise signal based on at least one control input.

Claim 13 requires, *inter alia*, a plurality of antennas aimed to form a limited region of coverage. The Examiner rejected this element of claim 13 using fundamentally the same argument as provided in claim 1. For the same reason stated above, neither Flick nor Pousada teach or fairly suggest positioning antennas to form a limited region for inhibiting wireless telecommunications.

No combination of Flick or Pousada teaches or suggests Applicants' invention as provided in claim 13. Claims 14-21 depend from claim 13 and are therefore also patentable.

Claims 1-11 and 13-21 are pending in this application. Applicants believe these claims meet all substantive requirements for patentability. The Examiner is therefore respectfully requested to pass this case to issuance.
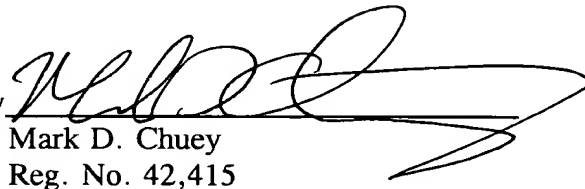
No fee is believed to be due by filing this paper. However, any fee due may be withdrawn from Deposit Account No. 21-0456 as specified in the Application Transmittal.

The Examiner is invited to contact the undersigned to discuss any aspect of this case.

Respectfully submitted,

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